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EXAMINER

FOX, CHARLES A

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/745,471

Applicant(s)

FUKUDA, MINORU

Examiner

Charles A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-134 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 131 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,7,8,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims withdrawn from consideration are 4-11, 18, 20, 23, 24, 26, 28, 30-32, 35, 37, 38, 40, 44-50, 53, 56, 57, 61, 63, 65, 71-78, 85, 87, 90, 91, 93, 95, 97, 98, 102, 104, 105, 107, 111-117, 120, 121, 123, 124, 130 and 132.

Continuation of Disposition of Claims: Claims rejected are 1-3, 12-17, 19, 21, 22, 25, 27, 29, 33, 34, 36, 39, 41-43, 51, 52, 54, 55, 58-60, 62, 64, 66-70, 79-84, 86, 88, 89, 92, 94, 96, 99-101, 103, 106, 108-110, 118, 119, 122, 125-129, 131, 133 and 134.

This application has been reassigned to examiner Charles A. Fox.

Election/Restrictions

Claims 4-11,18,20,23,24,26,28,30-32,35,37,38,40,44-50,53,56,57,61,63,65,71-78,85,87,90,91,93,95,97,98,102,104,105 107,111-117,120,121,123,124,130,and 132 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 11.

Applicant's election with traverse of the election of species in Paper No. 10 is acknowledged. The traversal is on the ground(s) that the application contains more than one species. This is not found persuasive because the inventive concept in figures 1-5 is clearly different from the inventive concept represented in the other figures. The claims reading upon the non-elected species also encompass subject matter that is distinguishable from the claims reading upon the elected subject matter.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections and/or Warnings

Applicant is advised that should claims 1-3,14 and 15 be found allowable, claim 68-70,81 and 82 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

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Claim 131 is objected to because of the following informalities: the word "rolls" on line 5 should read "roll". Appropriate correction is required.

Claim Rejections - 35 USC § 112 First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 34,62,101 and 129 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The intersection restricting means (25) set forth in claims 34,62,101,129 does not form a roll up space for the discharged sheet, but rather is used as a stop for the actual roll up device. See the specification page 12 lines 5-12. Since this limitation is all that sets the group of claims apart from other claims they have not been treated on the merits. Claims 36 and 103 which depend from claims 34 and 101 are withdrawn from consideration at this time as the scope of the claims is indeterminate at this time.

Claim Rejections - 35 USC § 112 Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3,13,15,41-43,52,70,82,99, and 108-110 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim has the

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limitation of" said direction" in line 5, but has two directions previously mentioned in the claim. It is not clear which direction applicant wishes to refer to in line 5 of the claim. Clarification is required. Claims 13,15,41,43,52,70,82,99,108, and 110 have the same deficiencies as mentioned above in regards to claim 3. The art rejections of these claims below treats the open ends as being perpendicular to the travel direction of the sheet.

In regards to claims 42 and 109 it is not clear as to what the limitation " ...the sheet entered said straight storing means with an inner periphery of said roll-up storing means..". Does the roll-up storage means enter the straight storage means along with the sheet? Clarification is required before the claims can be examined on the merits as the scope of the claims is indeterminate as it is written.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21,22,29,88,89 and 96

Claims 1-3,14-16,19,21,22,29,51,52,54,55,59,60,64,66-69,81,83,86,88,89,96,99, 119,122,126,127,131,133 and 134 are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer et al. In regards to claims 1,2,14,16, 51,54,55,59,60,64,66-70,81-83,122,126,127,131,133 and 134 Kramer et al. US 4,838,497 disclose an image

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reading device with a sheet conveying device mounted thereon, said sheet conveying device comprising:

a roll up storage (102) configured to roll up a sheet being discharged from said sheet conveying device (72,74), and storing said sheet in a roll;

a spacing member (100) configured to space a trailing edge of said sheet in said storage (102) from a body of said conveying device;

wherein said spacing member (100) serves as a connecting means for displacably connecting said roll up means to said sheet conveying device;

wherein said sheet conveying device discharges said sheet to outside of said image reading device;

wherein said roll up device is movable between a position for rolling up said sheet and a position for allowing a person to pick up said sheet at an operating position;

wherein said sheet is picked up from said roll up storage (102) with the trailing edge of the sheet spaced from said body;

wherein said image surface is positioned on the inside of the rolled sheet.

In regards to claims 3,15,52,70,82,99, and 119 Kramer et al. further disclose said roll up device as having an inner periphery that is arcuate in cross section in a direction of sheet conveyance, an inlet extending in a widthwise direction of the sheet, and opposite open ends in said widthwise directions.

In regards to claims 19 and 86 Kramer et al. also disclose that connecting member (100) also serves as a guide for guiding said sheet into said roll up device ((102). See column 4 lines 22-31.

In regards to claims 21,22,29,88,89 and 96 Kramer et al. further disclose that said inlet to roll up means (102) faces upwards when in the pick up position, and said roll up means is rotatable about a shaft such that said inlet adjoins said discharge means in the roll up position.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12,13,58, 79,80 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al. in view of Chapman et al. In regards to claims 12,19,58 and 125 Kramer et al. teach an image reading device with a sheet conveying device mounted thereon, said sheet conveying device comprising:

a roll up storage (102) configured to roll up a sheet being discharged from said sheet conveying device (72,74), and storing said sheet in a roll;

a spacing member (100) configured to space a trailing edge of said sheet in said storage (102) from a body of said conveying device;

wherein said spacing member (100) serves as a connecting means for displaceably connecting said roll up means to said sheet conveying device;

wherein said sheet conveying device discharges said sheet to outside of said image reading device;

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wherein said roll up device is movable between a position for rolling up said sheet and a position for allowing a person to pick up said sheet at an operating position;

wherein said sheet is picked up from said roll up storage (102) with the trailing edge of the sheet spaced from said body;

wherein said image surface is positioned on the inside of the rolled sheet.

Kramer et al. do not teach the device as having a speed control for the discharging means. Chapman et al. US 5,980,139 teaches providing a speed control apparatus to a sheet moving device (14). It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the discharge device taught by Kramer et al. with a sheet speed control as taught by Chapman et al. in order to have the sheet move at a speed that is proper for having the sheet clear the discharge rollers thereby avoiding damaging the sheet by keeping the sheet clear of said rollers.

In regards to claims 13 and 80 Kramer et al. further teach said roll up device as having an inner periphery that is arcuate in cross section in a direction of sheet conveyance, an inlet extending in a widthwise direction of the sheet, and opposite open ends in said widthwise directions.

Claims 33,41,100,108, and128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kando in view of Kramer. In regards to claims 33,100 and 128 Kando US 4,720,728 teaches a sheet conveying device comprising:

straight storing means (5) protruding to the rear of said device for storing sheets driven out of said device by discharging means (R6,R7);

a path diverter (6) for diverting a sheet from said straight storing means along a curved path to a second storage area;

wherein said diverter is selectively operable to divert said sheets when in place, or to allow sheets to pass to the straight storage means.

Kando does not teach the diverter as being a roll up device or that it pivots about a shaft. Kramer et al. teach a sheet conveying device comprising:

a roll up storage (102) configured to roll up a sheet being discharged from said sheet conveying device (72,74), and storing said sheet in a roll;

a spacing member (100) serves as a connecting means for displacably connecting said roll up means to said sheet conveying device;

wherein said displacement is of said roll up storage (102) pivoting about a shaft;

wherein said sheet conveying device discharges said sheet to outside of said image reading device;

wherein said roll up device is movable between a position for rolling up said sheet and a position for allowing a person to pick up said sheet at an operating position;

wherein said sheet is picked up from said roll up storage (102) with the trailing edge of the sheet spaced from said body;

wherein said image surface is positioned on the inside of the rolled sheet.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the roll up storage taught by Kramer et al. on the device taught by Kando in order to allow an operator of the device to either roll up a sheet discharged from said device or discharge it to a receiver such that it is flat.

In regards to claims 41 and 108 Kramer et al. also teach said roll up device as having an inner periphery that is arcuate in cross section in a direction of sheet conveyance, an inlet extending in a widthwise direction of the sheet, and opposite open ends in said widthwise directions.

Claims 25 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al. as applied to claims 16 and 83 above, and further in view of Mandel et al. Kramer et al. teach the limitations of claims 16 and 83 as above, they do not teach using Mylar as a guide for the discharged sheet. Mandel et al. US 5,383,656 teaches using a Mylar guide (50) to guide a sheet (P) at the inlet of a nip area (30), thereby forcing sheets entering the nip area to arrive in the proper order.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a Mylar guide as taught by Mandel et al. to the device taught by Kramer et al. in order to guide the sheets to a proper path as they enter the roll up storage device.

Claims 27 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al. as applied to claims 16 and 83 above, and further in view of Kando. Kramer et al. teach the limitations of claims 16 and 83 as above, they do not teach a straight storage means at the outside of the device. Kando teaches a straight storage means (5) located at the outside of a sheet conveying device(1). It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a straight storage means as taught by Kando on the device taught by Kramer et al. in order to

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allow an operator to choose the type of storage for a sheet that best suits the needs of the operator at any given time.

Claims 39 and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kando in view of Kramer et al. as applied to claims 33 and 100 above, and further in view of Takahashi et al. Kando in view of Kramer et al. teach the limitations of claims 33 and 100 as above, they do not teach multiple discharge ports or sheet reversing means. Takihashi et al. US 5,887,867 teaches an imaging device comprising :

a front portion (14) for loading a sheet into said device;

reverse discharging means (22) for reversing the sheet inserted into said front of device such that said sheet is discharged to the top of said device;

top storing means (30) for storing a discharged sheet;

switching controls in the form of a computer (500) are used to tell the device which discharge port a sheet is to be delivered to.

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide multiple discharge ports and switching means as taught by Takahashi et al. in the device taught by Kando in view of Kramer et al. in order to allow a sheet to be discharged in either a face up or face down orientation as desired by the operator, thereby allowing the sheet to be sent to a roll up storage or one of two straight storage devices.

Claims 17 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al. Kramer et al teach the limitations of claim s 16 and 83 as above, they do not teach a knob on the pivoting roll-up device. It would have been obvious to

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one of ordinary skill in the art, at the time of invention to place a knob on the roll-up device as taught by Kramer et al. as using a knob is well known in many arts as providing a means to grasp a movable part in order to make it easier to grasp said movable part, thereby moving it in a more controlled manner.

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Romanowski et al. 1988, Dutra, Jr. 1993, Nakazato et al. 1996, Kuo 1996, Yoshioka et al. 1998, and Yamada 2000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

CAF
February 10, 2003
CAF 2-10-03



EILEEN D. LILLIS
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